in Triplicate

DATE: 8 April 50
To: ~~All concerned~~ 1 copy to Student Council 1 to Pres. WNYU
From: Chief Engineer
Subject: Change in transmission.

The radio station, WNYU, was designed and constructed to operate on a system of carrier current. This system has been approved by the Federal Communications Commission for use by non licensed stations within the United States, provided these stations meet certain technical requirements. WNYU can and does meet these specifications.

However it has come to my attention that the Consolidated Edison Company does not permit wide area carrier current signals on their lines. Whether or not this ruling is legal is not particularly important since New York University obtains its power from said company, and therefore must abide by its rulings. This presents some formidible obstacles to further operation, however these obstacles are not insurmountable. With careful planning and much work the station can again operate in full compliance with all rulings.

To accomplish this there are two procedures which may be followed:

First: Since the largest audience group is located in Gould Hall, and furthermore since all logical technical procedure indicates a central location, the station should be located in or near Gould Hall. With such a location ~~in Gould Hall~~, the transmitting equipment the station now has, would be used to service Gould Hall and the entire campus. This would comply with F.C.C. regulations because campus wiring is underground and therefore radiation would be at a minimum. Also it would comply with Consolidated Edison Company's ruling because the signal transmitted in this way would be block by the campus metering and distribution systems (located in Bliss) and therefore the signal would be confined to the campus. All buildings off the campus would be linked to the station by lines rented from the Bell Telephone Company. Thus, all areas are covered and all rulings complied with. ~~This system is by far the easiest and cheapest.~~

Second: In the event it is impossible ~~for a~~ to obtain a campus location the station will continue to be in McCracken. However, Gould Hall must be linked with the station by a telephone line (rented from Bell Tel) and complete remote equipment located in Gould Hall. This equipment must be of size and power comparable to the present transmitter; ~~it will be a [illegible] transmitter~~. This will cover the campus; ~~and~~ all off campus locations must be linked by more rented lines.

It is obvious ~~which~~ both of the ~~two~~ systems (and there are only these two possible) are essentially the same ~~[illegible]~~, both from the standpoint of construction, ~~and~~ from the standpoint of operation and maintenance.

There is one more sad note to inject. Either choice will delay reoperation until about December 1950. Bell Tel's specifications are rigid and equipment to be used must be checked and tested to be certain it meets the specifications.

It can be done, perfectly, completely, and effeciently and finally I personally will guarantee it.

A.W. Nalang
Chief Engineer